

VALUE PROPOSITION

Expression of interest for topic **HORIZON-CL5-2026-11-D3-14**

Improved system design for innovative PV applications

HORIZON-CL5-2026-11-D3-14

Type: Innovation Action

Opening: 4 August 2026

Deadline: 1 December 2026



CREDENTIALS

CSTB is the French Scientific and Technical Center for Building. Its main mission is to ensure the quality and safety of buildings. It brings together multidisciplinary skills to develop and share essential scientific and technical knowledge covering construction products and buildings, and their integration into neighborhoods and cities. It guides stakeholders in the cycle of innovation from idea to market and supports the transformation of the construction sector in the context of the digital, environmental and energy transitions. The CSTB focuses on five key activities: research and expertise, evaluation, certification, testing and dissemination of knowledge.

CSTB's POTENTIAL CONTRIBUTION TO PROPOSAL

The ongoing energy transition is driving the rapid deployment of new renewable energy production infrastructure across the country, particularly in agricultural areas through the development of agrivoltaic systems. This evolution also introduces new safety challenges that must be carefully assessed and addressed. Key issues include emerging risks associated with photovoltaic installations and related energy systems (storage, energy management), their interaction with agricultural infrastructure and local ecosystems, and the implications for emergency response and incident management. These aspects have required in-depth analysis to ensure the safe and sustainable deployment of agrivoltaic solutions.

CSTB may bring the following contributions:

- Supporting the safe and efficient integration of energy systems (photovoltaic production, storage, energy management) into infrastructure and territories, ensuring their compatibility with agricultural uses, ecosystems, and energy infrastructure
- Ensuring fire and regulatory safety of innovative equipment (photovoltaic modules, storage systems), while promoting their large-scale adoption

- Carrying out risk analysis related to agrivoltaic energy systems, including photovoltaic installations, storage systems, and associated energy infrastructure in agricultural environments.
- Developing technical recommendations for designers, developers, operators, and installers of agrivoltaic systems to ensure the safety and reliability of installations.
- Drafting of technical guides on the prevention and management of risks associated with photovoltaic installations in agricultural settings.
- Raising awareness among stakeholders (local authorities, agricultural actors, energy developers, and industry) regarding the safety and risk management issues related to the deployment of agrivoltaic technologies. CSTB can actively participate in harmonization efforts...

ASSETS & EXPERIENCE LINKED TO HORIZON-CL5-2026-11-D3-14

- Support for innovation in energy systems integrated with infrastructure and territories (production, storage, consumption), ensuring their coherence, optimal interaction with their environment, and compliance with safety requirements, particularly in terms of fire safety and risk management. This approach relies on recognized scientific and technical expertise, as well as unique equipment, such as the [multi-scale fire reaction platform](#), which allows the characterization of developed products from the material scale up to the real system scale.
- Expertise in European and international standards and regulatory frameworks applicable to the safety of photovoltaic installations and energy infrastructure.
- Involvement in the development and implementation of fire safety standards and regulations, and support for public authorities in assessing new risks related to photovoltaics, electric vehicles and domestic electrical equipment.
- Support for manufacturers in the evaluation and development of photovoltaic systems that ensure the fire safety of buildings.
- Collaboration with [French Insurance Federation](#) (FFA): Study on the fire behavior of roofs with Photovoltaic Modules and the parameters influencing fire spread

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